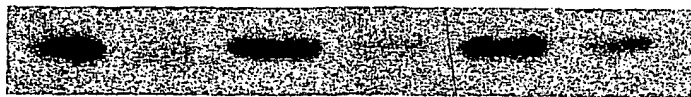


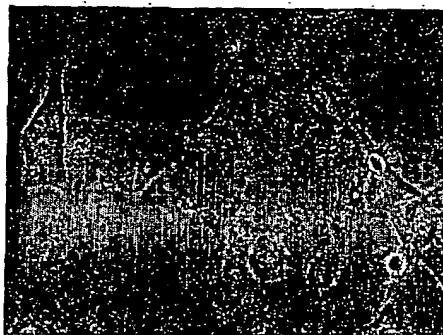
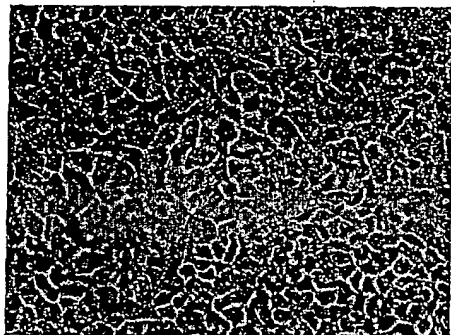
Figure 1

A

1 2 3 4 5 6



B



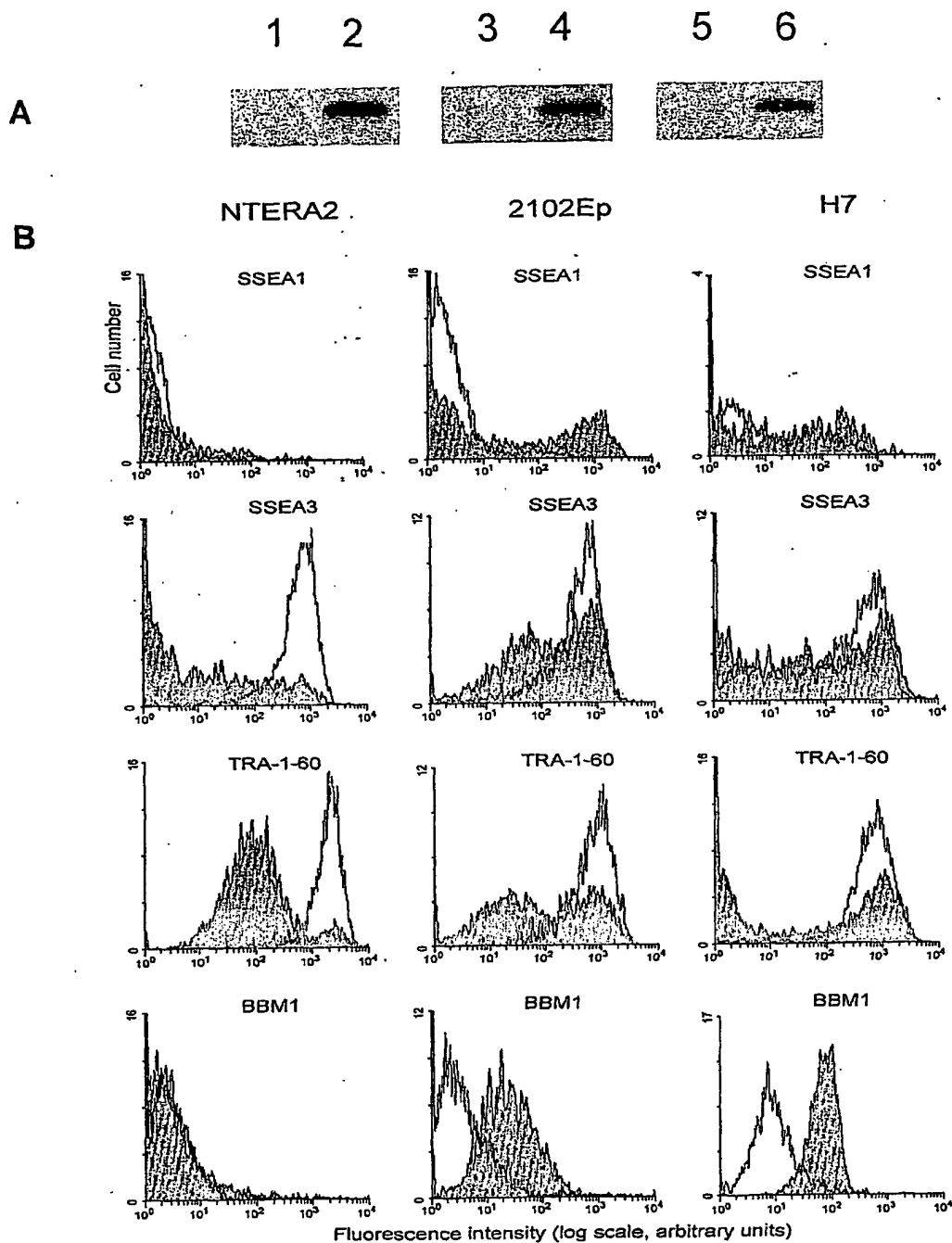
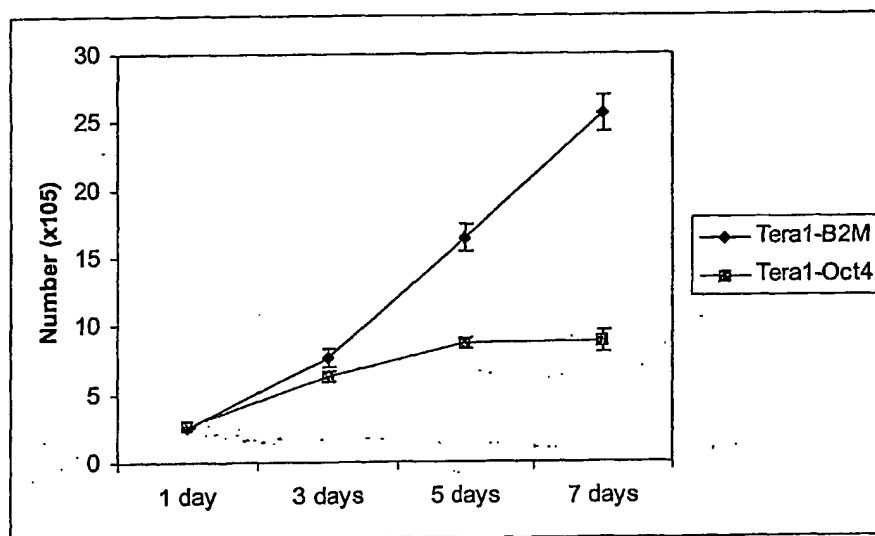
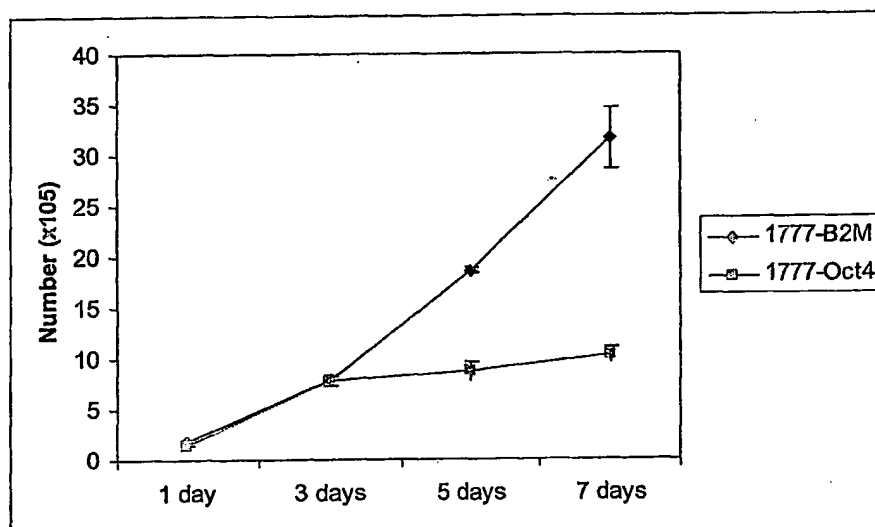
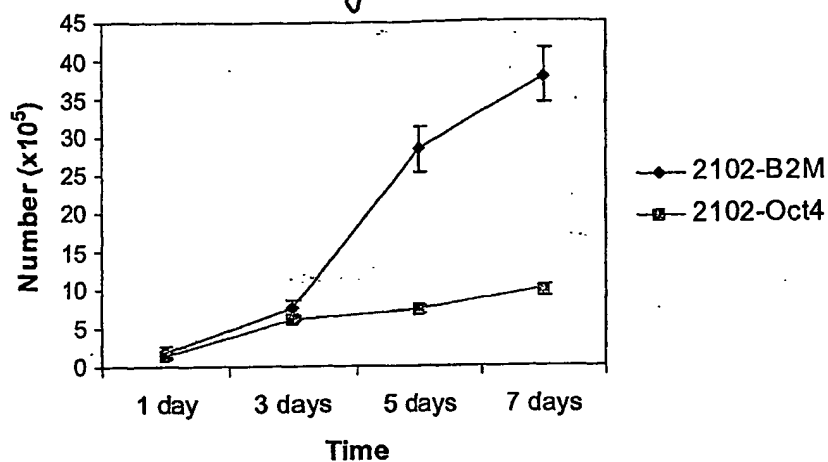


Figure 2

Figure 3



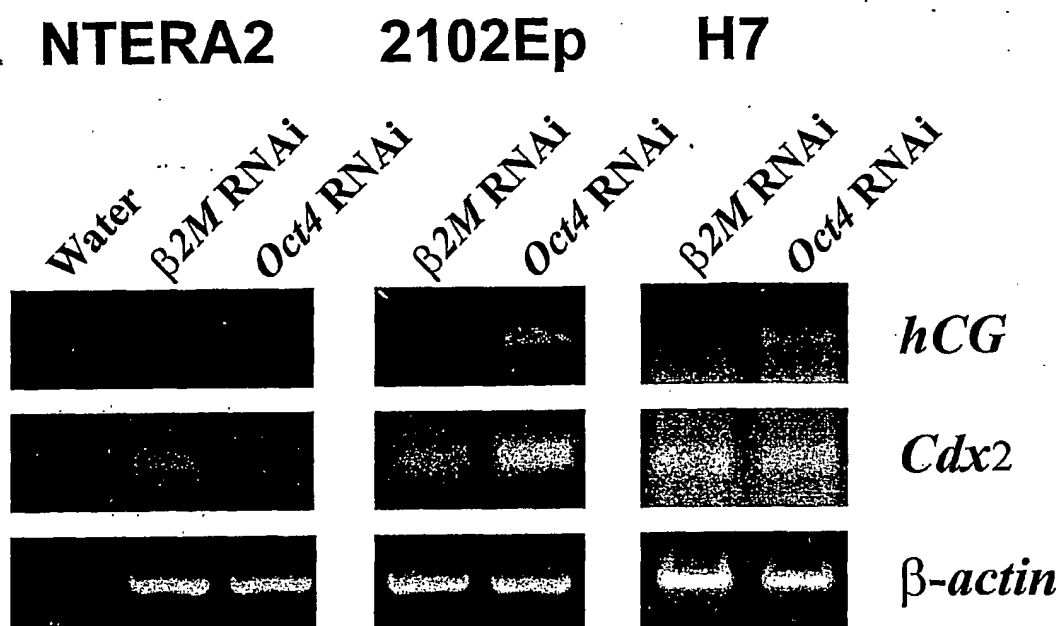


Figure 4

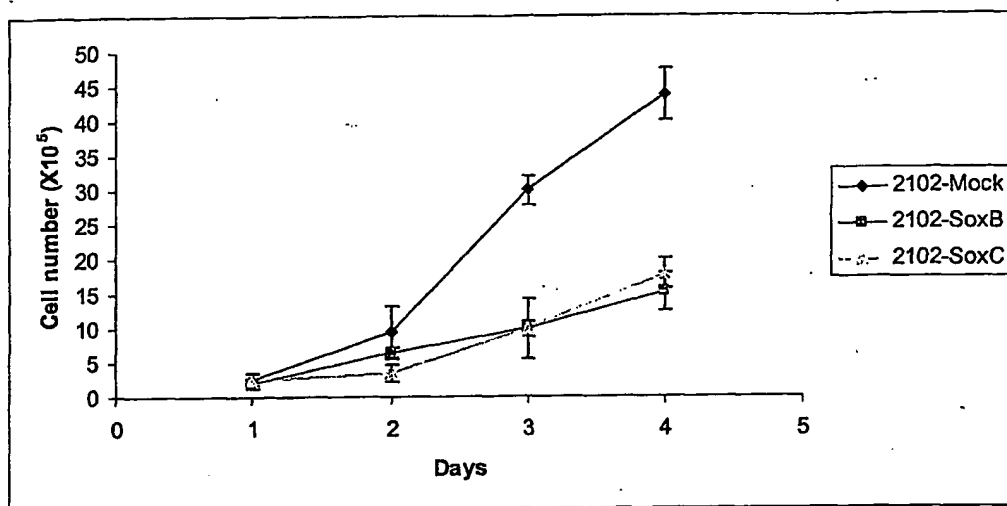


Figure 5

Figure 6

A

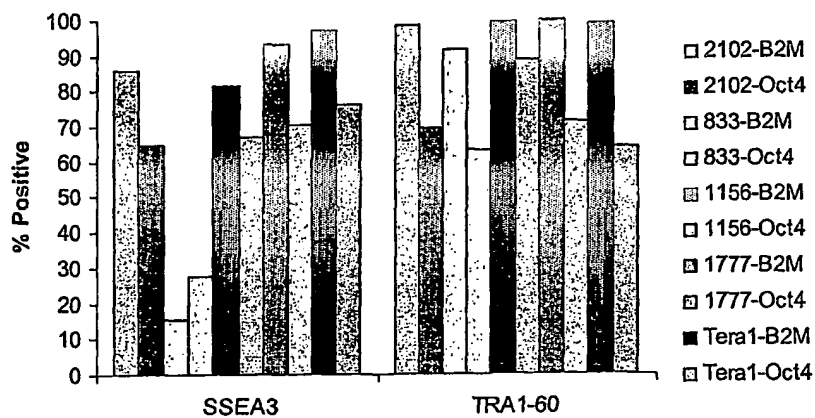
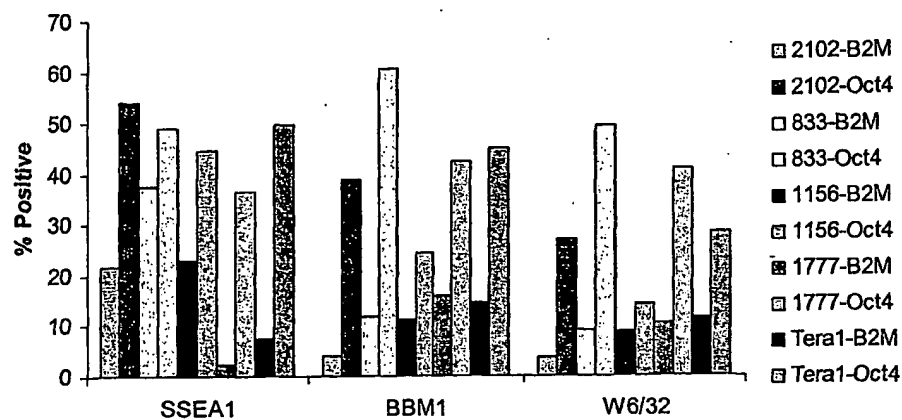


Figure 6.

B

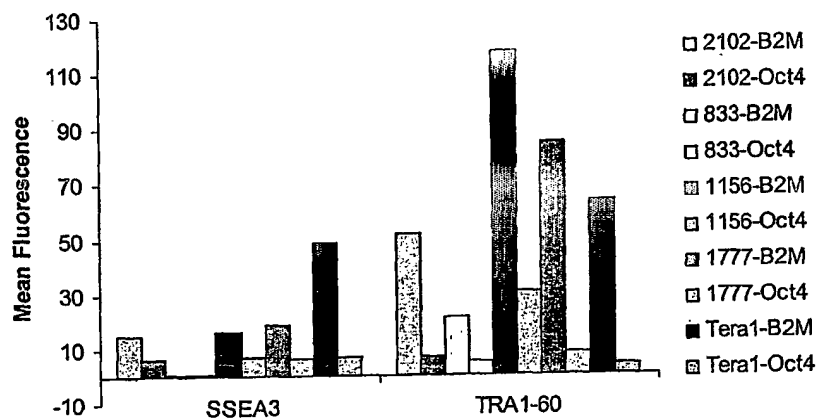
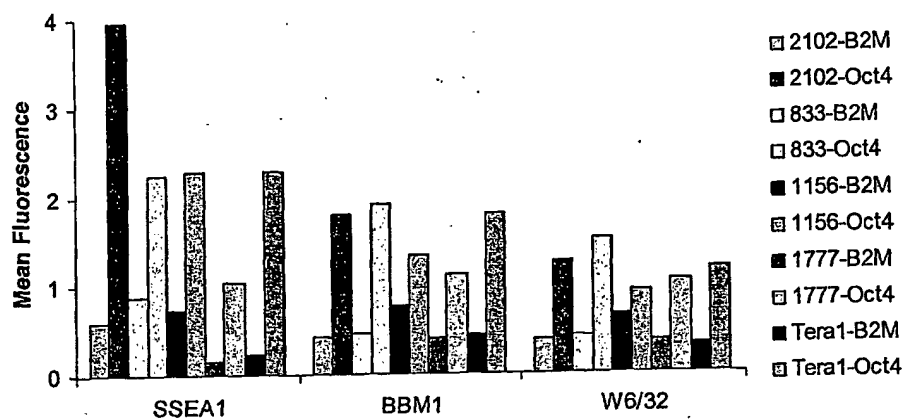


Figure 7

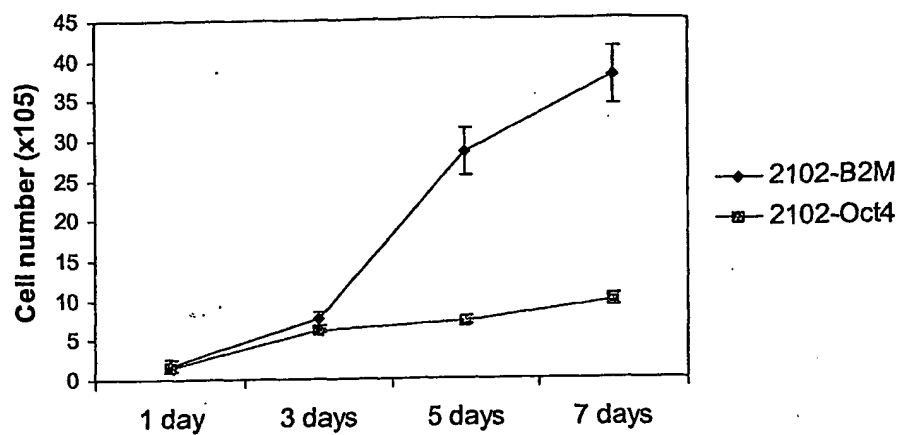
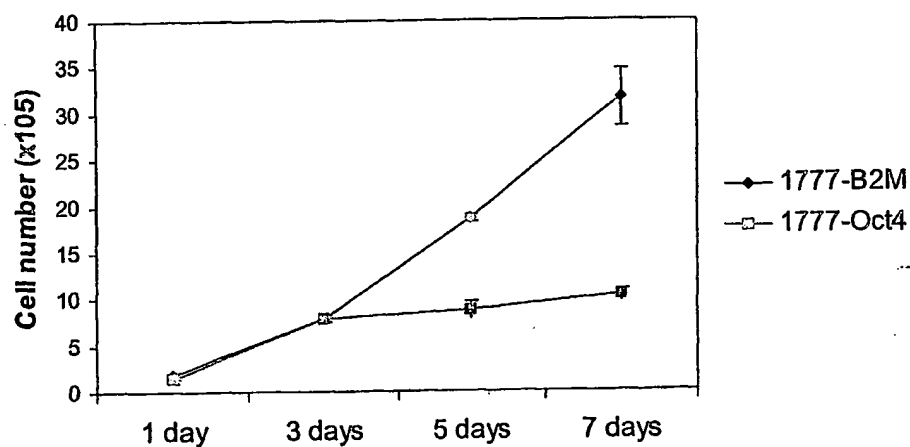
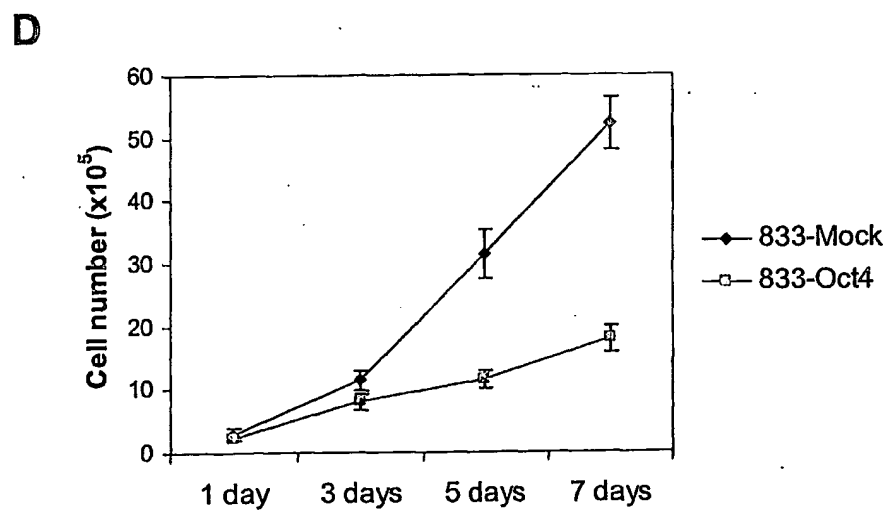
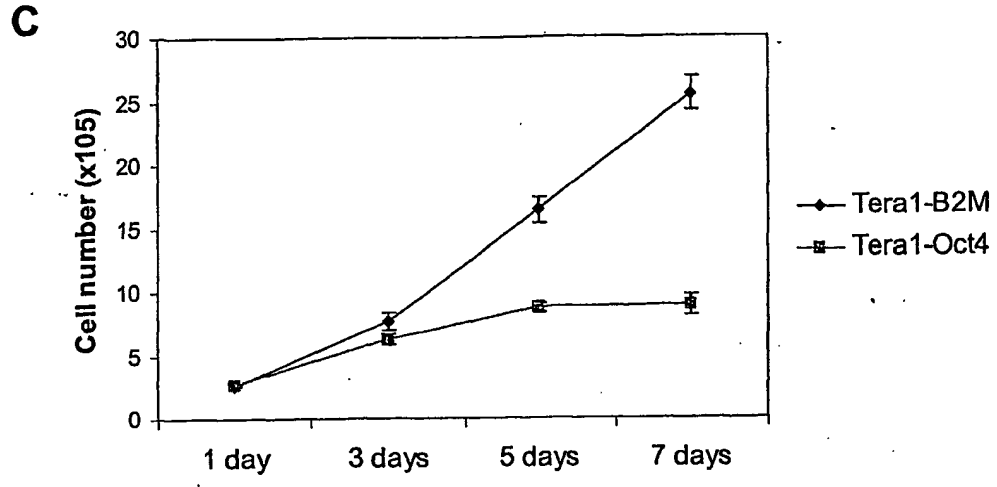
**A****B**



Figure 7



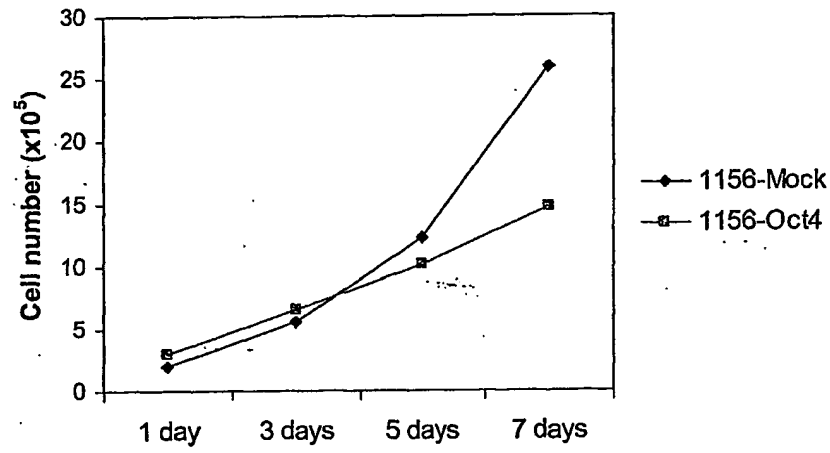
**E**

Figure 7

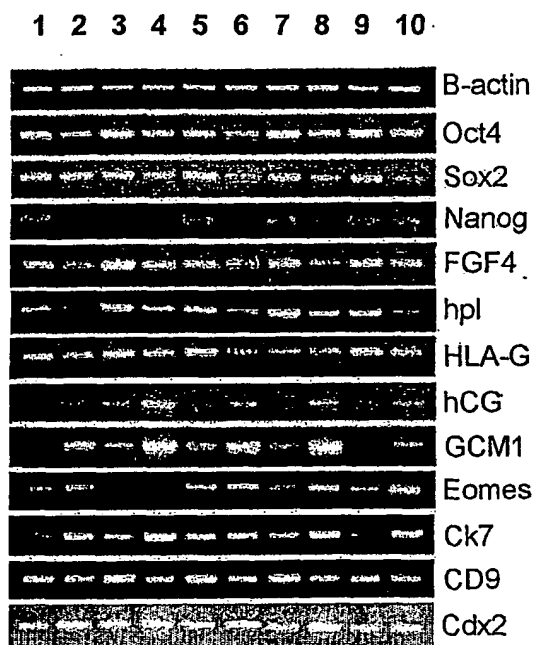


Figure 8

Figure 9

GTAGTCCTTTGTACATGCATGAGTCAGTGAACAGGGAATGGGTGAATGACATTTGTGGGTAGGTTATTT  
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 TTCTTGAATCCCGAATGGAAAGGGGAGATTGATAACTGGTGTGTTTATGTTCTTACAAGTCTTCTGCCTT  
 TTAATAATCCAGTCCCAGGACATCAAAGCTCTGCAGAAAGAACTCGAGCAATTTGCCAAGCTCCTGAAGCA  
 GAAGAGGATCACCTGGGATATACACAGGCCGATGTGGGGCTCACCTGGGGGTTCTATTTGGGAAGGTA  
 TTCAGCCAAACGACCATCTGCCGCTTTGAGGCTCTGCAGCTTAGCTTCAAGAACATGTGTAAGCTGCCGC  
 CCTTGTGTCAGAAGTGGGTGGAGGAAGCTGACAACAATGAAAATCTTCAGGAGATATGCAAAGCAGAAAC  
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 ATGTGTCAGTGTGTTCTGTAACCGGCGCCAGAAGGCAAGCGATCAAGCAGCGACTATGCACAACG  
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 CATTTTGGTGCCCCAGGCTATGGGAGCCCTCACTTCACTGCAGTGTACTCTCGGTCCCTTTCCCTGAGG  
 GGGAGCCTTTCCCCCTGTCTGTCTCACCCTCTGGGCTCTCCTTGCATTCAAACCTGAGGTGCTTGCCT  
 GCCC'TTCTAGGAATGGGGACAGGGGGAGGGGAGGAGCTAGGGAAAGAAAACCTGGAGTTTGTGCCAGGG  
 TTTTGGATTAAAGTTCTTCACTCAAGGAAGGAATTGGGAACAAAGGGTGGGGGACAGGGAGTTTGG  
 GGGCAACTGGTTGGAGGGAAGGTGAAGTTCAATGATGCTTGTATTTAATCCCAATCATGTATCACTT  
 TTTTCTTAATAAAGAGCTTGGGACACAGTAGATAGA

Figure 10a

CTATTAACTTGTTCAAAAAAGTATCAGGAGTTGTCAAGGCAGAGAAGAGAGTGTTCGCAAAAGGGGGAAA  
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 GAGGAGGGAAGCGCTTTTGTGATCCTGATTCCAGTTTGCTCTCTCTTTTTCCTCCCAATTTATTTT  
 CGCTGTATTTTCTCGGGAGCCCTGCGCTCCCGACACCCCGCCGCTCCCTCTCTCTCTCTCTCTCTCT  
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 CGCCCCCATGTACAACATGATGGAGACGGAGCTGAAGCCCGGGGCCGAGCAAACTTCGGGGGGCGGC  
 GCGGCAACTCCACCGCGGGCGGGCGGGCGGCAACCAGAAAAACAGCCCGGACCGGTCAAGCGGCCCA  
 TGAATGCCCTTCATGGTGTGGTCCCGCGGCGAGCGGCGCAAGATGGCCAGGAGAACCCCAAGATGCACAA  
 CTCGGAGATCAGCAAGCGCTGGGCGCGAGTGGAAACTTTTGTGGAGACGGAGAAGCGGCGTTCATC  
 GACGAGGCTAAGCGGCTGCGAGCGCTGCACATGAAGGAGCACCCGGATTATAATACCGGCCCGGGCGGA  
 AAACCAAGACGCTCATGAAGAAGGATAAGTACACGCTGCCCGCGGGCTGCTGGCCCCCGCGGCAATAG  
 CATGGCGAGCGGGTTCGGGTGGGCGCCGCTGGGCGCGGGCGTGAACCAAGCGCATGGACAGTTACGCG  
 CACATGAACGGCTGGAGCAACGGCAGCTACAGCATGATGCAGGACCAGCTGGGCTACCCGAGCACCCGG  
 GCCTCAATGCGCAGCGCGCAGCGCAGATGCAGCCCATGCACCGCTACGACGTGAGCGCCCTGCAGTACAA  
 CTCCATGACAGCTCGCAGACCTACATGAACGGCTCGCCACCTACAGCATGTCTACTCGCAGCAGGGC  
 ACCCTTGGCATGGCTCTTGGCTCCATGGGTTTCGGTGGTCAAGTCCGAGGCGAGCTCCAGCCCCCTGTGG  
 TTACCTCTTCTCCCACTCCAGGGCGCCCTGCCAGGCGGGGACCTCCGGGACATGATCAGCATGTATCT  
 CCGCGCGCGAGGTGCCGAACCCGCGCCCCCAGCAGACTTCACATGTCCAGCACTACCAGAGCGGC  
 CCGGTGCCCGCACGGCCATTAAACGGCACACTGCCCTCTCACACATGTAGGGGCCGACAGCGAACTGG  
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 GCTGCAAAAGAGAACCAATCCCATCCACACTCACGCAAAACCGCGATGCCGACAAGAAAACTTTTAT  
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 CGGGGAATGGACCTTGATAGATCTGGAGGAAAGAAAGTACGAAAACTTTTAAAGTTCTAGTGGT  
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 GAAAAAATGTTTTAATATTTGCAAGCACTTTTGTACAGTATTTATCGAGATAAATGCGCAATCAAAA  
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 TGCAGCTGAAATTTAGACAGTTGCAAAAGTGAAGAAAGAAATATTCAAATTTGGACATTTTAATTG  
 TTTAAAAATGTACAAAAGGAAAAAATAGAATAAGTACTGGCGAACCATCTCTGTGGTCTTGTTTAAAA  
 AGGGCAAAAGTTTGTAGCTGTACTAAATTTTATAACTTACTGTTAAAAAGCAAAATGGCCATGCAGGTTG  
 ACACCGTTGGTAATTTATAATAGCTTTTGTTCGATCCCACTTTCCATTTTGTTCAGATAAAAAAACC  
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 GGTTTTCCCCCTTTATTTCCGTAGTTGTATTTTAAAGATTCCGGCTCTGTATTTTGAATCAGTCTG  
 CCGAGAATCCATGTATATATTTGAACATAATCATCCTTATAACAGGTACATTTTCAACTTAAGTTTATA  
 CTCCTATATGCACAGTTTGAGATAAATAATTTTGAATATGGACACTGAAAAAATAAAAAA

Figure 10b

## SoxB

SoxB: 5'-CAACUCCAUGACCAGCUCGdTdT-3' (sense)

## SoxC

SoxC: 5'-CGAGCUGGUCAUGGAGUUGdTdT-3' (sense)

Figure 11

GGGAGCGGGCGAGTAGGAGGGGGCGCCGGGCTATATATATAGCGGCTCGGCTCGGGCGGGCTGGCGC  
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 CGCACTGACCGCTGACCGACGACGCGCCCTCGGGCCGGGATGTCGGGGCCCGGACGGCCGCGGTAGCGC  
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 ACCCAACGGCAGCTGGAGGCGGAGCTGGAGCGCCGCTGGGAGAGCTGGTGGCGCTCTCGTTGGCGCGC  
 CTGCCGTTGGCAGCGCAGCCAAAGAGGCGGCCGTCAGAGCGGCGCCGGCGACTACCTGCTGGGCATCA  
 AGCGGCTGCGGCGGCTCTACTGCAACGTGGGCATCGGCTTCCACCTCCAGGCGCTCCCCGACGGCCGAT  
 CGGCGGCGCGCACGCGGACACCGGACAGCCTGCTGGAGCTCTCGCCCGTGGAGCGGGCGCTGGTGAGC  
 ATCTTCGCGGTGGCCAGCCGCTTCTCGTGGCCATGAGCAGCAAGGGCAAGCTCTATGGCTCGCCCTTCT  
 TCACCGATGAGTGACGTTCAAGGAGATTCTCTTCCCAACAATAACAACGCTACAGTCTTACAAGTA  
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 GATATTAAATTAATTAATTAATTAATGTGTATATATTGCCACCAATATTTATAGTTCTGCGGGTGTGTTT  
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 AATCTTACCATTGGATTCTTTAACTTGT

Figure 12

GGTTTCCGGAGCTGCGGCGGCGCAGACTGGGAGGGGAGCGGGGTTCCGACGTCGCAGCCGAGGGAAAC  
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 CTACAGTGACAGCTTCCCAATGGAGCTGCGGCAGTTTCTGGCCCCCTGGATTGAGAGTCAAGATTGGGCA  
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 GAGCAGGTATCTTGAGAAGCCAATGGAGATTGCCCGGATTGTGGCCCGGTGCTGTGGGAAGAATCACGC  
 CTTCTACAGACTGCAGCCACTGCGGCCAGCAAGGGGGCCAGGCCAACACCCACAGCAGCCGTGGTGA  
 CGGAGAAGCAGCAGATGCTGGAGCAGCACCTTCAGGATGTCCGGAAGAGAGTGCAGGATCTAGAACAGAA  
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 ATGCAAGATCTGAATGGAACAACAGTCAGTGACAGGCAGAGATGCAGCAGCTGGAACAGATGCTCA  
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TCCAACATCTGTGATGATGCCAAATGCCTGGGCGTCCATCCTGTGGTACAACATGCTGACCAACAATCCCA  
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 GTTCTCCTCCACCACCAAGCGAGGACTGAGCATCGAGCAGCTGACTACACTGGCAGAGAACTCTTGGGA  
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 CGAAGGGTACATCATGGGCTTTATCAGTAAGGAGCGGGAGCGGGCCATCTTGAGCAGTAAGCCTCCAGGC  
 ACCCTCCTGCTAAGATTAGTGAAGCAGCAAGAAGGAGGCGTCACTTTCACTTGGGTGGAGAAGGACA  
 TCAGCGGTAAGACCCAGATCCAGTCCGTGGAACCATACACAAAGCAGCAGCTGAACAAACATGTCTATTGCT  
 TGAATCATCATGGGCTATAAGATCATGGATGCTACCAATATCCTGGTGTCTCCACTGGTCTATCTCTAT  
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 CCGTCTCTACTAAAGTACAAAAAATTAGCTGGGTGTGGTGGTGGGCGCTGTAGTCCCAGCTACTCGGG  
 AGGCTGAGGCGAGGAATCGCTTGAACCTGAGAGGCGGAGGTTGAGTGAAGCCAAATTGACCACTGCA  
 CACTGCATCCATCCTGGGCGACAGTCTGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Figure 13

>gi|13376297|ref|NM\_024865.1| Homo sapiens Nanog homeobox (NANOG), mRNA  
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 AGGCAACTCACTTTATCCCAATTCTTGATACCTTCTCTGGAGGTCTATTCTCTAATCATCTTCCA  
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 ACTAATCATGAGTGTGGATCCAGCTTGTCCCAAGCTTGCCTTGTCTTGAAGCATCCGACTGTAAAGAA  
 CTTACCTATGCCTGTGATTTGTGGGCTGAAGAACTATCCATCCTTGCAAATGTCTCTGCTGAGAT  
 GCCTCACACGGAGACTGTCT  
 TCCACAGTCCCAAGGCAAAACCAACCACTTCTGCAGAGAATAGTGTGCAAAAAAGGAAGACAAGGTCC  
 CAGTCAAGAAACAGAACAGCAACTGTGTTCTCTTCCACCACTGTGTGTAATCAATGATAGATTCA  
 GAGACAGAAATACCTCAGCCTCCAGCAGATGCAAGAACTCTCCAACTCTGAACCTCAGCTACAAACAG  
 GTGAAGACCTGGTTCCAGAACCAGAGAATGAATCTAAGAGGTGGCAGAAAAACAACTGGCCGAAGAATA  
 GCAATGGTGTGACGCAAGGCTCAGCACCTACCTACCCAGCTCTACTCTTCTTACCACAGGGATG  
 CCTGGTGAACCCGACTGGGAACCTTCCAATGTGGAGCAACCAAGCTGGAAACATCAACCTGGAGCAAC  
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 ACAATCAGGCTGGAACAGTCCCTTCTATAACTGTGGAGAGGAATCTCTGCAGTCTCTGCATGCAGTTCCA  
 GCCAAATCTCTCTGCACTGACTTGGAGGCTGCTTGGAGCTGCTGGGGAAGGCCCTTAATGTAATACAG  
 CAGACCACTAGGTATTTAGTACTCCACAAACCATGGATTTATCTTAACTACTCCATGAACATGCAAC  
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 TATCCAGTCAATCTCATGGAGGTGGAGTATGGTTGGAGCCTAATCAGCGAGGTTCTTTTTTTTTTTTT  
 CCTATTGGATCTTCTGGAGAAAATACTTTTTTTTTTTTTTTTGGAGCGAGTCTTGCTCTGTGCGCCAG  
 GCTGGAGTGCAGTGGCGCGGTCTTGGCTCACTGCAAGCTCCGCTCCCGGTTTCAAGCCATCTCTGCCC  
 TCAGCCTCCCGAGCAGCTGGGACTACAGGCGCCGCACTCGCCCGGCTAATATTTGTATTTTGTAGTA  
 GAGACAGGGTTTCACTGTGTTAGCCAGGATGGTCTCGATCTCTGACCTTGTGATCCGCCCGCTCGGCC  
 TCCCTAACAGCTGGGATTACAGGCGTGAGCCACCGCGCCCTGCTAGAAAAGACATTTTAATAACCTTGG  
 CTGCTAAGGACAACATTTGATAGAAGCCGCTCTGGCTATAGATAAGTAGATCTAATACTAGTTTGGATAT  
 CTTTAGGGTTTGAATCTAATCTCAAGAAATAAGAAATACAAGTACGAATGGTGTGATGAAGATGATTCTG  
 ATTGTTTGGGATTGGGAGGCTTGGCTTATTTTTTTTAACTATTGAGGTAAAGGGTTAAGCTGTAACATA  
 CTTAATTGATTTCTTACCGTTTGTGGCTGTGTTTGTCTATATCCCTAATTTGTTGGTGTGCTAATCTT  
 TGTAGAAAGAGGTCTGTATTTGCTGCATCGTAATGACATGAGTACTACTTTAGTTGGTTTAAAGTTCAA  
 TGAATGAACAAATATTTTCTTTAGTTGATTTTACCTGATTTACCGAGTGTTCGATGAGTAATA  
 TACAGCTTAAACAT

Figure 14

GGAGAATCCCGGAAAGGCTGAGTCTCCAGCTCAAGGTCAAAACGTCCAAGGCCGAAAGCCCTCCAGTTT  
 CCCCTGGACGCTTCTGCTCTCTGCTACGACCTTCTGGGGAAAACGAATTTCTCATTTTCTTCTTAA  
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 AATTGGCCCTCGGTCTTCCAGCGTGTGCCGCCCATGGGATACAGCACAGTAAGGAGCTAAACAGAACCC  
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 TCATTTGTAGTTGCCCTTAAATAATGAATACAATTTCCAAATGGTCTCTAACATTTCTTACAGAACTA  
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 TGTAGAAGACAAAATGTTCAATATATTTAGTTGTAAACCAAGTATCAACTACATATTGTAAAGCCC  
 ATTTTAAATACATTGTATATATGTGTATGCACAGTAAAAATGGAACTATATTGACCTAAAAAATAA  
 AAA

Figure 15

GGAGCTCTCCCCGGTCTGACAGCCACTCCAGAGGCCATGCTTCGTTTCTTGCCAGATTTGGCTTTTCACT  
 TCCTGTTAATCTGGCTTTGGGCCAGGCAGTCCAATTTCAAGAATATGCTTTCTCCAATTTCTGGGCTT  
 AGATAAGGCGCCTTCAACCCAGAAAGTTCCAACCTGTGCCTTATATCTTGAAGAAATTTTCCAGGATCGC  
 GAGGCGAGCAGCAGCACTGGGGTCTCCCGAGACTTATGCTACGTAAAGGAGCTGGGCGTCCGCGGGAATG  
 TACTTCGCTTTCTCCAGACCAAGGTTCTTTCTTTACCCAAAGAAATTTCCCAAGCTTCTCTCTGCT  
 GCAGAAGCTCTCTACTTTAACCTGTCTGCCATCAAGAAAGGGAACAGTTGACATTGGCCAGCTGGGC  
 CTGGACTTGGGGCCAAATCTTACTATAACCTGGGACCAGAGCTGGAACCTGGCTCTGTTCTGTTTCAAG  
 AGCCTCATGTGTGGGGCCAGACCAACCCCTAAGCCAGGTAAATGTTTGTGTGCGGTCACTCCATGGCC  
 ACAAGGTGTCTTCACTTCAACCTGTCTGGATGTAGCTAAGGATTGGAATGACAACCCCGGAAAAATTTT  
 GGGTTATCTCTGGAGATACTGGTCAAGAAGATAGAGACTCAGGGGTGAATTTTCAAGCTGAAGACACCT  
 GTGCCAGACTAAGATGCTCCCTTCACTGCTTCCCTGCTGGTGGTGAATCTCAACCTGATCAGTGGCAACCC  
 TTCTCGGAAAAGGAGAGCAGCCATCCCTGTCCCAAGCTTTCTGTGAAGAACCTCTGCCACCGTCAACAG  
 CTATTCATTAACCTCCGGACCTGGGTGGCACAAGTGGATCATTTGCCCAAGGGGTTCTATGGCAAATT  
 ACTGCCATGGAGAGTGTCCCTTCTCACTGACCATCTCTCTCAACAGCTCCAATTTATGCTTTTCAAGC  
 CTTGATGATGCGCTTGACCCAGAGATCCCCAGGCTGTGTATCCCCAAGCTGTCTCCCATTTCC  
 ATGCTCTACCAGGACAATAATGACAATGTCAFTCTACGACATTATGAAGACATGGTAGTCGATGAATGTG  
 GGTGTGGGTAGGATGTGAGAAATGGGAATAGAAGGAGTGTCTTAGGGTAAATCTTTAATAAACTACC  
 TATCTGGTTTATGACCCTTAGATCGAAATGTCA

Figure 16

GGCACCCCTTCGGCGAGCGCTGTTTGTATTAGGGCTCGGTGAGTCCAATCAGGAGCCAGGCTGCAGTTTTC  
 CGGCAGAGCAGTAAGAGGCGCCTCCTCTCTCTTTTATTACCAGCAGCGCGCGCAGACCCCGGACTC  
 GCGCTCGCCCGTGGCGCCCTCGGCTTCTCTCGCGCTGGGAGCACCTCCGCGCGGCGGCTTCTCCAT  
 GCGCAGCGCCCGCGAGGAGCTAGACGTCACTTGGAGCGCGCGCGGACCGTGGATGGCCTTGACTGAC  
 GGCGCTGGTGTGTCGCGAAGCGCTTCGGGGCGCGGGTGGGACGCCAGCGACTCCAGAGCCTTTCCAG  
 CGCGGAGCCCTCCACGCGCCTTCCCCATCTCTCTCTGCTCTCTCTGCTCCCGGGCGGAGCGG  
 GGGCCCCGCGCGCGCCAGCAACTGCGGGACGCTCAGCTCGACACGGAGGCGGCGGCGGACCCCGGCC  
 CGCTCGTGTGCTCAGTTCTACGCTTCGCATCCCTTCGGGGCTCCCAAGGACCTTCGCGCCTGGGG

TCGCGGGCCCCGGGGGCAACCTGTGAGCTGGGAGGACTTGCTGCTGTTCAGTACCTCGACCAAGCCGC  
 GACCGCCAGCAAGCTGCTGTGGTCCAGCCGCGCGCCAGCTGAGCCCCCTTCGCAACCGAGCAGCCGGAG  
 GAGATGTACAGACCCCTCGCCGCTCTCTCCAGCCAGGTCGCGCCGCTACGACGCGCGCCCGCGGCT  
 TCGTGCACTCTGCGGCGCGCGGCGAGCAGCCGCGCGCGCGCCAGCTCCCCGGTCTACGTGCCCCACAC  
 CCGCGTGGGTTCATGCTGCCCGGCTACCGTACCACCTGCAGGGTTCGGGCAGTGGGCCAGCCAACCAC  
 GCGGGCGCGCGCGGCGCACCCGCGTGGCTTCAGGCCTCGGCCGACAGCCCTCCATACGGCAGCGGAG  
 GCGGCGCGGCTGGCGCGCGGGCCGCGGGGCTGGCGGCGCTGGCTCAGCCGCGCGCACGTCTCGGCGCG  
 CTTCCCTACTCTCCAGCCCGCCCATGGCCACGGCGCGCGCGGGAGCCGGAGGCTACGCGGCGCGCG  
 GGCAGTGGGGCGCGGGAGGCGTGAGCGCGCGCGCAGTAGCCTGGCGGCCATGGCGCGCGCGAGCCCC  
 AGTACAGCTCGCTGTGCGCGCGCGCGCGCTGAACGGGACGTACCACCACCACCACCACCACCACCA  
 CCATCCGAGCCCTACTCGCCCTACGTGGGGGCGCCACTGACGCTGCTGGCCCGCGCGGACCCCTTCGAG  
 ACCCGGTGCTGCACAGCCTGCAGAGCCGCGCGGAGCCCGCTCCCGGTGCCCGGGGTCCCAGTGCAG  
 ACCTGCTGGAGGACCTGTCCGAGAGCCGCGAGTGCCTGAACCTGCGGCTCCATCCAGACGCGCTGTGGCG  
 GCGGGACGGCACCGGCCACTACCTGTGCAACGCTGCGGGCTCTACAGCAAGATGAACGGCTCAGCCGG  
 CCCCTCATCAAGCCGAGAGCGCGTGCCTTATCACGCGGCTTGGATTGTCTGTGCCAACTGTCA  
 CCACAACTACCACCTTATGGCGCAGAAACGCGGAGGGTGAACCCGTGTGCAATGCTTGTGGACTCTACAT  
 GAACTCCATGGGGTGCCAGACCACTTGCTATGAAAAAGAGGGAATTCAAACAGGAAACGAAAACT  
 AAGAACATAAATAAATCAAGACTTGTCTGTGAATAGCAATAATCCATTCCATGACTCCAACTTCCA  
 CCTCTTCTAACTCAGATGATTGCAGCAAAATACTTCCCCACAACACACCTACAGCCTCAGGGGCGGG  
 TGCCCCGGTGATGACTGGTGGGGAGAGAGCACCAATCCCGAGAACAGCGAGCTCAAGTATTCGGGTCAA  
 GATGGGCTCTACATAGGCGTCAGTCTCGCCTCGCCGCGCGAAGTACGTCTCCGTGCGACCGGATTCCT  
 GGTGCGCCCTTGGCCCTTGGCCCTGAGCCACGCGCGCAGGAGGAGGGCTCCGCGCGGGGCTCACTC  
 CACTCGTGTCTGCTTTTGTGCGCGGTCCAGACAGTGGCGACTGCGCTGACAGAACGTGATTCTCGTGCC  
 TTTATTTTGAAGAGATGTTTTCCTCAAGAGGCTTGCTGAAAGAGTGAGAGAGATGGAAGGGAAGGGCC  
 AGTGCAACTGGGCGCTTGGGCCACTCCAGCCAGCCGCTCCGGGCGGACCCCTGCTCCACTTCCAGAAG  
 CCAGGACTAGGACCTGGGCTTGCCTGCTATGGAATATTGAGAGAGATTTTTTAAAAAGATTTTGCATT  
 TTGTCCAAATCATGTGCTTCTTCTGATCAATTTTGGTTGTTCCAGAATTTCTTCATACCTTTTCCACAT  
 CCAGATTTTATGTGCTTCTGAGAGAGATCACTTGAGGCCATTTGTTACACATCTCTGGAGGCTGAGTC  
 GGTTCATGAGGTCTCTTATCAAAATATTACTCAGTTTGCAAGACTGCATTGTAACCTTTAACATACACTG  
 TGACTGACGTTTCTCAAAGTTCATATTGTGGCTGATCTGAAGTCAGTCGGAATTTGTAAACAGGGTAG  
 CAAACAAGATATTTTTCTTCCATGTATACAATAATTTTTTAAAAAGTGCAATTTGCGTTGCAGCAATCA  
 GTGTTAAATCATTTGCATAAGATTTAACAGCATTTTTTATAATGAATGTAACATTTTAACTTAATGGTA  
 CTTAAAAATATTTAAAGAAAAATGTTAACTTAGACATTTCTATGCTCTTTTACAACATACATCCATTT  
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 TTGTTAAGAAATTTTTATACAAGAACCAATATACCCCTTTATTTTACTGTGGAATATGTGCTGAAAA  
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 GAAGTCTGTATAGTGTGACTAACCCACAGGCAGGTTGGTTTACATTAATTTTTTTTTTGAATGGGATGT  
 CCTATGAAACCTATTTACCAGAGTTTAAAAATAAAAGGGTATTGTTTTGCTTCTGTACAGTGAGT  
 TCCTTCCCTTTTCAAAGCTTTCTTTTATGCTGTATGTGACTATAGATATTATATAAAACAAGTGACAG  
 TGAAGTTTGCAAAATGCTTTAAGGCTTCTTTCAAAGCATAGTCTTTTGGAGCCGTTTGTACCTTTT  
 ATACCTTGGCTTATTGAAGTTGACACATGGGTTAGTTACTACTCTCCATGTGCATTGGGGACAGTTTT  
 TATAAGTGGGAAGGACTCAGTATTATTATTTGAGATGATAAGCATTTTGTGTTGGGAACAATG

Figure 17

GGCAGAGCCGAGATGCTCGCTCCGTGGCCTTAGCTGTGCTCGCGTACTCTCTCTTTCTGGCCTGGAG  
 GCTATCCAGCGTACTCCAAAGATTAGGTTTACTCACGTATCCAGCAGAGAATGAAAGTCAAATTTCC  
 TGAATTGCTATGTGCTGGGTTTCATCCATCCGACATTGAAGTTGACTTACTGAAGAAATGGAGAGAGAAT  
 TGAAAAAGTGGAGCATTAGACTTGTCTTTAGCAAGGACTGGTCTTCTATCTCTTGTACTACACTGAA  
 TTCACCCCCACTGAAAAAGATGAGTATGCCGTGCCGTGTGAACCATGTGACTTTGTACAGCCCCAGATAG  
 TTAAGTGGGATCGAGACATGTAAGCAGCATCATGGAGGTTTGAAGATGCCGCAATTTGGATTGGATGAAT  
 CCAAATTCGCTTGGCTTTTAAATATTGATATGCTTATACACTTACACTTTATGCACAAATGTAGG  
 GTTATAATAATGTTAACATGGACATGATCTTCTTTATAATTCTACTTTGAGTGTCTCTCCATGTTTGTAT  
 GTATCTGAGCAGGTTGCTCCACAGGTAGCTTAGGAGGGCTGGCAACTTAGAGGTGGGGAGCAGAGAATT  
 CTCTTATCCAACATCAACATCTTGGTCAGATTGAACTCTTCAATCTCTTGCACTCAAAGCTTTGTTAAGA  
 TAGTTAAGCGTGCATAAGTTAACTTCAATTTACATACTCTGCTTAGAATTTGGGGGAAAAATTGAGAAAT  
 ATAATTGACAGGATTATTGGAAATTTGTTATAATGAATGAAACATTTTGTATATAAGATTATATTTAC  
 TTCTTATACATTTGATAAAGTAAGGCATGGTTGTGGTTAATCTGGTTTATTTTGTTCACAAAGTTAAAT  
 AAATCATAAACTTG



Figure 18

ATGGCCGTCATGGCGCCCCGAACCTCCTCCTGCTACTCTCGGGGGCCCTGGCCCTGACCCAGACCTGGG  
CGGGCTCCCACTCCATGAGGTATTTCTTACATCCGTGTCCCGGCCCGCGCGGGAGCCCGCTTCAT  
CGCCGTGGGCTACGTGGACGACACGCACTTCGTGCGGTTCCGACAGCGACGCCGAGCCAGAGGATGGAG  
CCGCGGGCGCCGTGGATAGAGCAGGAGGGGCCGAGTATTGGGACCAGGAGACACGGAATGTGAAGGCC  
AGTCACAGACTGACCGAGTGGACCTGGGGACCTGCGCGGCTACTACAACAGAGCGAGGCCGGTTCTCA  
CACCATCCAGATAATGTATGGCTGCGACGTGGGGTTCGACGCGGCGCTTCCCTCCGCGGGTACCGGCAGGAC  
GCCTACGACGGCAAGGATTACATCGCCCTGAACGAGGACCTGCGCTCTTGGACCGCGCGGACATGGCGG  
CTCAGATCACCAAGCGCAAGTGGGAGGCGGCCATGAGGCGGAGCAGTTGAGAGCCTACCTGGATGGCAC  
GTGCGTGGAGTGGCTCCGAGATACCTGGAGAACGGGAAGGAGACGCTGCAGCGCACGGACCCCCCAAG  
ACACATATGACCCACCAACCCATCTCTGACCATGAGGCCACCTGAGGTGCTGGGCCCTGGGCTTCTACC  
CTGCGGAGATCACACTGACCTGGCAGCGGGATGGGAGGACCAGACCCAGGACACGGAGCTCGTGGAGAC  
CAGGCTTCAGGGGATGGAACCTTCCAGAAGTGGGCGGCTGTGGTGGTGCCTTCTGGAGAGGAGCAGAGA  
TACACCTGCCATGTGCAGCATGAGGGTCTGCCAAGCCCTCACCTGAGATGGGAGCTGTCTTCCAGC  
CCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCTTGGAGCTGTGATCACTGGAGCTGTGGT  
CGCTGCCGTGATGTGGAGGAGGAAGAGCTCAGATAGAAAGGAGGGAGTTACACTCAGGCTGCAAGCAGT  
GACAGTGCCAGGGCTCTGATGTGTCCCTCACAGCTTGTAAAGTGTGA

Figure 19

AGACGCCGAGATGCTGGTCATGGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGCGGCCCTGGCCCTGACC  
GAGACCTGGGCGGCTCCCACTCCATGAGGTATTTCTACACCTCCGTGTCCCGGCCCGCGCGGGGAGC  
CCCGCTTCATCTCAGTGGGCTACGTGGACGACACCCAGTTTCGTGAGGTTTCGACAGCGACGCCCGAGTCC  
GAGAGAGGAGCGCGCGGGCGCGTGGATAGAGCAGGAGGGGCCGAGTATTGGGACCAGGAACACACAGATC  
TACAAGGCCAGGACAGACTGACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACAGAGCGAGG  
CCGGGTCTACACCTCCAGAGCATGTACGGCTGCGACGTGGGGCCGAGCGGGCGCTCCTCCGCGGCA  
TGACCATGACGCTTACGACGCAAGGATTACATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCGCG  
GACACGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCGTGAGGCGGAGCAGCGGAGAGCCTACC  
TGAGGGGCGAGTGCCTGGAGTGGCTCCGAGATACCTGGAGAACGGGAAGGACAAGCTGGAGCGCGCTGA  
CCCCCAAAGACACAGTGAACCCACCCCATCTCTGACCATGAGGCCACCTGAGGTGCTGGGCCCTG  
GGTTTCTACCTTGGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGACCAACTCAGGACACTGAGC  
TTGTGGAGACCAGACAGCAGGAGATAGAACCTTCCAGAAGTGGGCGAGCTGTGGTGGTGCCTTCTGGAGA  
AGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCTCACCTGAGATGGGAGCCG  
TCTTCCAGTCCACCGTCCCATCGTGGGCATGTGTGCTGGCCTGGCTGTCTAGCAGTTGTGGTTCATCG  
GAGCTGTGGTGTGCTGTGATGTGTAGGAGGAAGAGTTAGGTGGAAAAGGAGGGAGCTACTCTCAGGC  
TGCGTGACGACAGTGCAGGAGCTGTGATGTGTCTCTACAGCTTGAAGGCTGAGACAGCTGTCTT  
GTGAGGAGTGTGAGTGCAGGATTTCTTACGCTCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTT  
CTGCAAGGCACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCC  
TTGTGTCACTGTGACCCCTGTTTCGATGCTGACCTGTGTTTCTCCCA

Figure 20

GAATTCGGGGGGGAGATGCGGGTCATGGCGCCCCGAACCTCATCCTGCTGCTCTCGGGAGCCCTGGCCC  
TGACCGAGACCTGGGCGGCTCCCACTCCATGAGGTATTTCTCCACATCCGTGTCTTGGCCCGGCCGCGG  
GGAGCCCGCTTTCATCGCAGTGGGCTACGTGGACGACACGCACTTCGTGCGGTTTCGACAGCGACGCGCG  
AGTCCAAGAGGGGAGCGCGGGAGCCGTGGGTGGAGCAGGAGGGGCCGAGTATTGGGACCGGGAGACAC  
AGAAGTACAAGCGCCAGGCACAGGCTGACCGAGTGAACCTGCGGAACTGCGCGGCTACTACAACAGAG  
CGAGGACGGGTCTCACACCTCCAGAGGATGTTGGCTGCGACCTGGGGCCGAGCGGGCGCTCCTCCG  
GGGTATAACCAAGTTCCCTACGACGCAAGGATTACATCGCCCTGAACGAGGATCTGCGCTCCTGGACCG  
CCGCGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCGTGAGGCGGAGCAGCGGAGAGC  
CTACCTGGAGGGCAGTGCCTGGAGTGGCTCCGAGATACCTGGAGAACGGGAAGGAGACGCTGCAGCGC  
GCGGAACACCAAGACACAGTGAACCACTCCCGTCTCTGACCATGAGGCCACCTGAGGTGCTGGG  
CCCTGGGCTTCTACCTGCGGAGATCACACTGACCTGGCAGTGGGATGGGAGGACCAAACTCAGGACAC  
CGAGCTTGTGGAGACGAGGACGAGGATGGAACCTTCCAGAAGTGGGCGAGCTGTGGTGGTGCCTTCT  
GGAGAAGAGCAGAGATACAGTGCCTGTTTTCAGCACGAGGGGCTGCCGAGCCCTCACCTGAGATGGA  
AGCCGTCTTCCAGCCACCATCCCATCGTGGGCATCGTTGTGCGCTGGCTGTCTGCTGTCTTAGC  
TGTCTTAGGAGCTATGGTGGCTGTGTGATGTGTAGGAGGAAGAGCTCAGGTGGAAAAGGAGGGAGCTGC  
TCTCAGGCTGCGTCCAGCAACAGTGCAGGAGGCTGTGATGAGTCTCTCATCGTTGTAAAGCCTGAGACA  
GCTGCCCTGTGTGGGACTGAGATGCAAGATTTCTTACACCTCTCTTGTGACTTCAAGAGCCTCTGGCA  
TCTCTTTCTGCAAGGCATCTGAATGTGTCTGCGTTCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAG  
CCACCCCGGTGTCCACCTGACCCCTGTCCCACTGACCTGTGTTTCCCTCCCGATCATCTTCTCTG

TTCCAGAGAAGTGGGCTGGATGTCTCCATCTCTGTCTCAACTTCATGGTGCGCTGAGCTGCAACTTCTTA  
CTTCCCTAATGAAGTTAAGAACCTGAATATAAATTTGTTTCTCAAATATTTGCTATGAAGGGTTGATGG  
ATTAATTAATAAGTCAATTCTGGAAGTTGAGAGAGCAAATAAAGACCTGAGAACCCTTCAAAAACCCG  
CCCGAATTC

Figure 21

ATGGTAGATGGAACCCCTCCTTTTACTCCTCTCGGAGGCCCTGGCCCTTACCCAGACCTGGGCGGGCTCCC  
ACTCCTTGAAGTATTTCCACACTTCCGTGTCCCGGCCCGGCCGCGGGAGCCCCGCTTCATCTCTGTGGG  
CTACGTGGACGACACCCAGTTCTGTGCGCTTCGACAACGACGCGCGAGTCCGAGGATGGTGCCGCGGGCG  
CCGTGGATGGAGCAGGAGGGGTCTAGAGTATTGGGACCGGGAGACACGGAGCGCCAGGGACACCGCACAGA  
TTTTCCGAGTGAACCTGCGGACGCTGCGCGGCTACTACAATCAGAGCGAGGCCGGGTCTCACACCTGCA  
GTGGATGCATGGCTGCGAGCTGGGGCCCCGACGGGCGCTTCTCCGCGGTATGAACAGTTTCGCTACGAC  
GGCAAGGATTATCTCACCTGAATGAGGACCTGCGCTCCTGGACCGCGGTGGACACGGCGGGCTCAGATCT  
CCGAGCAAAAGTCAAATGATGCCCTCTGAGGCGGAGCACCAGAGAGCCTACCTGGAAGACACATGCGTGA  
GTGGCTCCACAAATACCTGGAGAAGGGGAAGGAGACGCTGCTTCACCTGGAGCCCCAAAGACACACGTG  
ACTCACACCCCATCTCTGACCATGAGGCCACCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA  
TCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGACACGGAGCTCGTGGAGACCAGGCCTGC  
AGGGGATGGAACCTTCCAGAAGTGGGCGAGCTGTGTGTGTCCTTCTGGAGAGGAGCAGAGATACACGTGC  
CATGTGCGAGCATGAGGGGCTACCCGAGCCGCTCACCTGAGATGGAAGCCGCTTCCAGCCACCATCC  
CCATCTGGGGCATCATGTGCTGGCTGGTTCTCTTGGATCTGTGTCTCTGGAGCTGTGGTTGCTGTGT  
GATATGGAGGAAGAAGAGCTCAGGACATTTCTTCCAACAGGTGGAAGAGGAGGAGCTACTCTAAGGCT  
GAGTGGAGCGACAGTGCCAGGGGTCTGAGTCTCACAGCTGTGA

Figure 22

ATGGCGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTTGGGCGGGCTCCC  
ACTCCTTGAGGTATTTTCCAGCACCGCTGTGTGCGGCCCGGCCGCGGGAGCCCCGCTACATCGCCGTGA  
GTACGTAGACGACACGCAATTCCTGCGGTTTCGACAGCGACGCGCGATTCCGAGGATGGAGCGCGGGAG  
CCGTGGGTGGAGCAAGAGGGGCCGAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGA  
CTGACCGAGTGGCCCTGAGGAACCTGCTCCGCCCTACAACAGAGCGAGGCTGGGTCTCACACCTCCA  
GGGAATGAATGGCTGCCACATGGGGCCCCGACGGACGCTTCTCCGCGGTATCACAGCACGCGTACGAC  
GGCAAGGATTACATCTCCCTGAACGAGGACCTGCGCTCCTGGACCGCGCGGACACCGTGGCTCAGATCA  
CCCAGCGCTTCTATGAGGCGAGGAATATGCGAGGAGTTTCAGGACCTACCTGGAGGGCGAGTGCCTGGA  
GTTGCTCCGCGAGATACTTGGAGAATGGGAAGGAGACGCTACAGCGCGCAGATCCTCCAAAGGCACACGTT  
GCCACACCCCATCTCTGACCATGAGGCCACCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA  
TCACGCTGACCTGGCAGCGGGATGGGGAGGAACAGACCCAGGACACAGAGCTTGTGGAGACCAGGCCTGC  
AGGGGATGGAACCTTCCAGAAGTGGGCGCTGTGTGTGTCCTTCTGGAGAGGAACAGAGATACACATGC  
CATGTGCGAGCAGAGGGGCTGCCCGAGCCCTCATCTGAGATGGGAGCAGTCTCCCGAGCCACCATCC  
CCATCTGGGCATCGTTGCTGGCCTTGTGCTTCTGGAGCTGTGTGCTCACTGGAGCTGTGTGCTGCTGT  
GATGTGGAGGAAGAAGAGCTCAGATAGAAAAGAGGGAGCTACTCTCAGGCTGCAGTCACTGACAGTGCC  
CAGGGCTCTGGGGTGTCTCTCACAGCTAATAAAGTGTGAGACAGCTTCTTGTGTGGGACTGAGAAGCAA  
GATATCAATGTAGCAGAATTGCACTTGTGCTCACGAACATACATAAATTTTAAAAATAAGAATAAA

Figure 23

CCCATTAGGTGACAGGTTTTTAGAGAAGCCAATCAGTCGCGCGGTCTGGTTCTAAAGTCTCGCTCA  
CCCACCGGACTCATCTCCCCAGACGCCAAGGATGGTGGTTCATGGCGCCCCGAACCCCTCTCTCTGTGC  
TCTCGGGGGCCCTGACCTGACCGAGACCTGGGCGGGCTCCCACTCCATGAGGTATTTACGCGCCCGCGT  
GTCCCGGCCCGCGCGGGAGCCCCGCTTCATCGCCATGGGCTACGTGGACGACACGCAGTTCTGTGCGG  
TTCGACAGCGACTCGGCGTGTCCGAGGATGGAGCCGCGCGCGGTGGGTGGAGCAGGAGGGCCGAGT  
ATTGGGAAGAGGAGACACGGAACACCAAGGCCACGCACAGACTGACAGAATGAACCTGCAGACCTGCG  
CGGCTACTACAACAGAGCGAGGCCAGTTCTCACACCTCCAGTGGATGATTGGCTGCGACCTGGGGTCC  
GACGAGCGCTCCTCCGCGGTATGAACAGTATGCCTACGATGGAAGGATTACCTCGCCCTGAACGAGG  
ACCTGCGCTCCTGGACCGCAGCGGACACTGCGGCTCAGATCTCCAAGCGCAAGTGTGAGGCGGCCAATGT  
GGCTGGAAGAGGAGACACCTGAGGGGACGCTGCGTGGAGTGGCTCCACAGATACCTGGAGAACGGG  
AAGGAGATGCTGCAGCGCGGACCCCCCAAGACACACGTGACCCACCACCTGTCTTTGACTATGAGG  
CCACCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGATCATACTGACCTGGCAGCGGGATGGGA  
GGACAGACCCAGGACGTGGAGCTCGTGGAGACCAGGCTGCAGGGGATGGAACCTTCCAGAAGTGGGA  
GCTGTGGTGGTGCCTTCTGGAGAGGAGCAGAGATACAGTGCATGTGCAGCATGAGGGGCTGCCGAGC  
CCCTCATGCTGAGATGGAAGCAGTCTTCCCTGCCACCATCCCATCATGGGTATCGTTGCTGGCCTGGT  
TGTCTTGCAGCTGTAGTCACTGGAGCTGCGGTGCTGTGTGTGGAGAAAGAAGAGCTCAGATTGA  
AAAGGAGGGAGCTACTCTCAGGCTGCAAGTAAGTATGAAGGAGGCTGATCCCTGAGATCCTTGGGATCTT

**Figure 24**

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